CZECHOSLOVAKIA / Atomic and Molecular Physics. Heat D-4

Abs Jour : Ref Zhur - Fizika, No 4, 1957, 9010

Author : Janáč, Karel

Title : Precision Thermostatic Ovens for High Temperatures.

Orig Pub : Slaboproudy obzor, 1956, 1, No 8, 474-480

Abstract : No abstract.

Card : 1/1

16.8000 16.7000

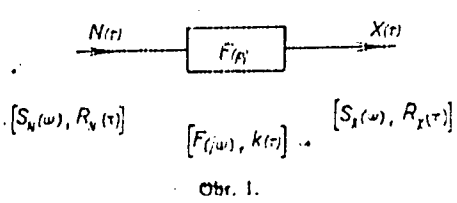
23066
Z/026/61/006/001/002/004
D231/D305

AUTHOR: Janáč, Karel

TITLE: The determination of correlation functions on the output of a generator of continuous random processes

PERIODICAL: Aplikace matematiky, v. 6, no. 1, 1961, 25-34

TEXT: The author describes a method for calculating correlation functions on the output of a generator. The generator is represented by a linear filter with constant coefficients, transfer function F(p), and white noise input. The method shows the calculation of the correlation function on the output as the response of a second filter with transfer function Q(p). The diagram (Fig. 1) shows the transfer function F(p), the input N(t), with spectral density $S_N(\omega)$, (differentiable for all values of ω,) and the corresponding correlation function $R_N(\tau)$. On the output side the continuous random process X(t), with spectral



Obr. 1.

Fig. 1

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The determination of correlation...

density $S_X(\omega)$, and correlation function $R_X(\tau)$ are shown. The filter is so constructed that the constant function F(p) can be altered, thereby changing the characteristics of signal X(t). The problem is to calculate the correlation function $R_X(\tau)$ on the filter output, when the transfer function F(p) and the input signal N(t) are given. As is known (Ref. 1: V. V. Soludovnikov, Vvedeniyye v statisticheskuyu dinamiku sistem avtomaticheskogo upravleniya (Introduction to the Statistical Dynamics of Systems of Automatic Control) Gosizdat, Tekh. Teor. Lit, Moskva, 1952) the output signal spectral density is given by

$$S_x(\omega) = |F(j\omega)|^2 S_N(\omega) \qquad (1)$$

the correlation function by

$$R_x(\tau) = \frac{1}{2\pi}\int_{-\infty}^{+\infty} S_x(\omega)\, e^{j\omega\tau}\, d\omega . \qquad (2)$$

and

$$R_x(\tau) = \frac{1}{2\pi}\int_{-\infty}^{+\infty} |F(j\omega)|^2 S_N(\omega)\, e^{j\omega\tau}\, d\omega . \qquad (3)$$

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$Q \in \mathfrak{F}$, that for all p $F(p) \cdot F(-p) = Q(p) + Q(-p)$ (6)

Lemma 1 states: Let $\left[\bar{Q}(p)\right] < CR^{-k}$ for $R > R_0$, where $p = Re^{j\varphi}$ $(0 \leqq \varphi \leqq 2\pi)$ and R_0, C, k are positive constants, then for $t > 0$

$$\lim_{R\to\infty} \int_{C_R^+} \Phi(p)\, e^{pt}\, dp = 0,$$

and for $t < 0$

$$\lim_{R\to\infty} \int_{C_R^-} \Phi(p)\, e^{pt}\, dp = 0$$

where

$$C_R^+ = \left\{p : p = Re^{j\phi};\ \frac{\pi}{2} \leqq \phi \leqq \frac{3}{2}\pi\right\}$$

and

$$C_R^- = \left\{p : p = Re^{j\phi};\ 0 \leqq \phi \leqq \frac{\pi}{2} \ \ nebo\ \ \frac{3}{2}\pi \leqq \phi \leqq 2\pi\right\}.$$

Rule 4 states: The random process correlation function on the output of a linear filter with the transfer function $F \in \mathfrak{F}$ fed (input) with white noise, is given by the impulse characteristics of

JANAC, K., inz. CSc.; SEDLAK, J., inz.; SEMMIDUESPY, Zd., inz.

Characteristic values of computers. Automatizace 7 no. 6: 160-161 Je '64.

Card 2/3

SUBMITTED: 20Feb63 ATD PRESS: 3131 ENCL: 00

SUB CODE: DP, EC NO REF SOV: 000 OTHER: 000

Card 3/3

JAŇAC, A.

Problems concerning building for storage of ensilage with special regard to prefabricated constructions. (To be contd.) p. 312.

STAVEBNICKY ČASOPIS. (Slovenska adademia vied) Bratislava, Czechoslovakia, Vol. 7, no. 5, 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 9, no. 1, Jan, 1960

Uncl.

JANAC, Karol, inz., ScC.

Evaluation of the microclimate of multirow cow barns of prefabricated elements during the winter season in southern Slovakia. Zemedel tech 9 no.2:147-164 Ap '63.

1. Ceskoslovenska akademie ved, Ustav stavebnictva a architektury Slovenskej akademie vied, Bratislava.

JANAC, Karol, inz., CSc.

Analysis of basic factors of microclimate in swine houses for automatic wet feeding of swine in southern Slovakia. Mechan. tech. 16 no.1:65-[illegible] Ja '64.

1. Ceskoslovenska akademie v. [illegible], Ustav stavebnictva a architektury Slovenskej akademie [illegible] [illegible]; Ministerstvo [illegible] inz. R. Strnad, [illegible].

JANAC, Karol, inz. Dr.

Floors in barns for domestic animals. Zemedel tech 10 no.2:129-144 F'64.

1. Ustav stavebnictva a architektury, Slovenska akademia vied, Bratislava; Riaditel ustavu inz. CSc. M. Skrucany.

JANAC, Karol, inz. CSc.; SVOBODA, Stanislav, inz.

Heat engineering in construction of barns. Poz stavby 12 no.11:488-492 '64.

1. Institute of Building and Architecture, Slovak Academy of Sciences, Bratislava (for Janac).
2. State Regional Institute for Standardization and Development of Agricultural and Forestry Buildings, Bratislava (for Svoboda).

HUTSCHENREUTHER, Gunter, [illegible]; [illegible], Karol, [illegible].

Operation and climate [illegible] of a new type of barns for free housing of dairy cows on deep litter in the southern Slovakia climate zone. Zemedel tech 10 no.10:629-636 O'64.

1. Chair of Agricultural Buildings and Design, Higher School of Architecture and Building, Weimar, German Democratic Republic (for Hutschenreuther). Institute of Building and Architecture, Slovak Academy of Sciences, Bratislava. Director of the Institute [illegible] (for [illegible]).

[illegible], V.

[illegible]

PART I [illegible]. (Another paper on [illegible])
[illegible], Hungarian. Vol. [illegible], no. [illegible], [illegible]. [illegible].

[illegible]

Incl.

[illegible], [illegible].

The new modern Senjanovac-Gradac road. [illegible].

PTT [illegible]Zad. (Drustvo za [illegible])
Zagreb, Yugoslavia. Vol. [illegible], no. [illegible], July/Oct. [illegible].

[illegible] List of the East European Accessions (EEAI) [illegible], Vol. [illegible], [illegible], [illegible].

Incl.

[illegible], Z.

[illegible]

[illegible]

[illegible]

[illegible]

JANACEK, E.

Applications of domestic asphalt breccia in the construction of the surface layer of cast asphalt. p. 317.

PUT I SAOBRACAJ. (Drustvo za puteve Srbije)
Beograd, Yugoslavia. Vol. 4, no. 7/10, July/Oct. 1958.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 8, Aug. 1959.

Uncl.

JANACEK, Emil, inz.

Influence of the roughness of the pavement on road traffic.
Publ Teh fak Sarajevo 3 no. 1:39-46 '60.

JANACEK, Emil, prof. inz. (Sarajevo)

Reconstruction of the Rastelica-Bradina highway. Gradevinar 14 no.8:259-267 Ag'63.

CRVCANIN, Milos, inz.; JANACEK, Emil, inz.; SUBOTIC, Uglesa, inz.; BOSNIC, Petar, inz.; VELJKOVIC, Branko, inz.

Proposal for changing the drain profiles at the construction of new railways. Zeleznice Jug 19 no.8:38-40 Ag '63.

1. Clanovi Katedra za saobracaj Gradevinskog fakulteta Univerziteta u Sarajevu.

CZECH/37-59-2-11/20

AUTHORS: Jaroslav Frána, František Janáček

TITLE: Letter to the Editor: Some Luminescent Properties of AgBr Containing Ag_2S

PERIODICAL: Československý Časopis Pro Fysiku, 1959, Nr 2, p 210

ABSTRACT: The spectral distribution and decay time of normal and deformed discs of AgBr + 0.02 mol % Ag_2S were studied at low temperatures. The materials were prepared by a method due to Stassiw (Ref 1); at -180 °C. Three maxima were registered: at 6450 and 6100 A.U. and a weak maximum at 5350 A.U. At -110 °C, the two red maxima coincided and the maximum at 5350 A.U. disappeared. The integral intensity of luminescence in deformed plates was considerably smaller than in non-deformed ones. These measurements were taken at -110 °C, but no quantitative relations have been established. The decay time of luminescence was measured on the same samples by an apparatus described by Tolstoy and Feofilov (Ref 3). At -190 °C, the intensity decreased according to a hyperbolic law. The red part of the spectrum decayed more rapidly than the green part. Pre-exposure of the

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APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000619420014-4"

JANACEK, J.

Experiences with the operation of Ruzicka's high efficiency maltkkiln. p. 101.

(Kvasny Prumysl. Vol. 3, no. 5, May 1957. Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 10, October 1957. Uncl.

YANACHEK, I. [Janacek, J.]

Methods and results of structural survey. Prace ust naft 18:35-36 '61.

JANACEK, J.; KOLARIK, J.

On the structure and properties of hydrophile polymers and their gels. Pt.1. Coll Cz Chem 29 no.2:492-499 F '64.

1. Institute of Macromolecular Chemistry, Czechoslovak Academy of Sciences, Prague.

JANACEK, J.; TOMKA, J.; SEBENDA, J.

On the structure and properties of polyamides. Pt.16. Coll Cz Chem 30 no.3:692-701 Mr '65.

1. Institute of Macromolecular Chemistry of the Czechoslovak Academy of Sciences, Prague. Submitted December 14, 1963.

JANDEK, J., KOLARI[illegible]

Structure and properties of [illegible]
Pt.3. [illegible] Chem. Soc. [illegible] My [illegible].

1. Institute of Macromolecular Chemistry of the [illegible]
Academy of Sciences, Prague. Submitted [illegible]

ACC NR: AT6[illegible]

AUTHOR: Janacek, Jaromir

ORG: Kromeriz Research Institute for Grain Production, Opava Station, Opava (Vyzkumny ustav obilnarsky Kromeriz, pracoviste Opava)

TITLE: Automatic distillation apparatus

SOURCE: Chemicke listy, no. 12, 1965, 1445-1446

TOPIC TAGS: chemical laboratory apparatus, distillation, automatic machine

ABSTRACT: The author describes a glass apparatus designed for the production of 8 liters per hour of distilled water. The apparatus maintains a given level by being automatically switched on by low level of the produced water. PVC piping supplies the distilled water within a building, by gravity flow, to various outlets. There is no need for servicing, apart from the cleaning of the distillation container and of the electrodes every 1 to 3 months. Orig. art. has: 1 figure. [JPRS: 34,669]

SUB CODE: 07 / SUBM DATE: 19Jan65

Card 1/1

0916 1769

JANACEK, J.

Preliminary results of studies of the paleogeography and tectogenesis of the older Miocene in the Lab-Malacky aria in Slovkia. p.283.
SBORNIK, ODDIL GEOLOGICKY, Prague, Vol. 21, 1954 (published 1955)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6 June 1956, Uncl.

Hydrogeologic and geochemical studies of the emergence of hydrogen sulfide-containing mineral waters at Bad Smrdáky, Slovakia. Josef Junáček and Jaroslav Janík (Inst. Naftnerforsch., Brno, Czech.). *Geol. Práce* (Bratislava) 5, 62-107(1956)(German summary).—Chem. analyses of the waters show them to be mainly Na bicarbonate waters contg. free H_2S and methane. They are believed to be related to waters of the oil-field type. — Michael Fleischer

JANACKEK, J.

"Prelimianary report on the recent stratigraphic explorations in the upper Pannonian of the inner Alpine basin of Vienna."

p. 5 (Casopia Pro MineralogiiA Geologh, Vol. 2, no. 3, 1957, Cachoslovakia)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7. No. 2, February 1958

JANACEK, J.

GEOGRAPHY & GEOLOGY

Periodicals: GEOLOGICKE PRACE ; ZPRAVY. No. 14, 1958

JANACEK, J. A new salt deposit in eastern Slovakia. p. 72

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 5, May 1959, Unclass.

JANACEK, J.

Notes on the tectonics and paleogeography of the Neocene in eastern Slovakia. p. 354

Prague, Ustredni ustav geoloticky. VESTNIK. Praha, Czechoslovakia, Vol. 33, no. 5, 1958

Monthly List of East European Accessions (EEAI), LC, Vol. 8, no. 11, Nov. 1959
Uncl.

JANACEK, J.

"Age and origin of the Pozdisovce gravel formation in the Tisza River basin in Estern Slovakia."

GEOLOGICKE PRACE; ZPRAVY, (Slovenska akademia vied, Geologicky ustav Dionyza Stura) Bratislave, Czechoslovakia, No. 15, 1959.

Monthly List of East European Accessions (EEAI), LC., Vol8, No. 8, August 1959.

JANACEK, Josef

Geologic structure and naphtha geologic problems of the Neogene basin of eastern Slovakia. Geol prace 63:179-184 '62.

1. Ceskoslovenske naftove doly, n.p., Hodonin.

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000619420014-4"

Jan Janacek

Distr: 4E3d 27 21

Determination of calcium oxide in admixtures by flame photometer. Lubomír Urbánek, Antonín Coloněk, and Jiří Janáček (Výzkum VŽKO, Ostrava, Czech.). Hutnické listy 13, 710-21(1958).—Two methods for the detn. of CaO in admixts. were elaborated. In the 1st method, Ca is isolated by pptn. as CaC_2O_4 which is dissolved in HCl, and then photometrically detd. with the flame photometer. In the 2nd case, Ca is isolated on the ion exchanger, eluted with a EDTA soln., and photometrically detd. Petr Schneider

JANACEK, J. ; SPIDLA, J.

Combusting and distilling apparatus for the determination of nitrogen. p. 183.

KRIDLA VLASTI. (Svaz pro spolupraci s armadou)
Praha, Czechoslovakia
Vol. 5, no. 8, Aug. 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, no. 11.
Nov. 1959
Uncl.

CZECH/34-59-1-10/28

Electrolytic Isolation of Non-metallic Inclusions in Steel by means of the Modified Klinger-Koch Apparatus

Table 1 gives a comparison of a few parameters of the new electrolyser with the hitherto used one. Table 2 contains results of the analysis of isolates of oxide inclusions in five low carbon steel specimens; one of the specimens, B1, was isolated with the previously used instrument and the time required for doing so was twice as long. The instrument is being used mainly for isolation of carbides and sulphides.
There are 6 figures, 2 tables and 5 references, 1 of which is Czech, 3 German and 1 English.

ASSOCIATION: Výzkum a vývoj VŽKG, Ostrava (Research and Development VŽKG, Ostrava)

Card 2/2

G/004/60/007/06/04/022
B023/B015

AUTHOR: Janáček, J., Engineer

TITLE: Influence of Structure on Some Properties of Mixtures and Vulcanizates of Filled Elastomers. I. Influence of the Specific Surface of Carbon Black Particles

PERIODICAL: Plaste und Kautschuk, 1960, Vol. 7, No. 6, pp. 289-293

TEXT: The physical properties of rubber vulcanizates depend on the chemical composition and physical structure of the elastomer, its extent and nature of interlacing and on the concentration, the specific surface, the surface quality and the extent of linking of the filler (in the present paper - carbon black). If the other variables are kept as constant as possible, the dependence of the physical properties on the specific surface of carbon black can be determined. Various elastomers (their composition is shown in a Table) have been investigated. The different sorts of carbon black (with low to medium degree of linking) used as filling agents are listed in a Table. The dependence of the physical properties of the vulcanizate on the specific surface of carbon black

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84208
G/004/60/007/010/005/007
B015/B064

15 9130 2109 1220 9

AUTHOR: Janáček, J., Engineer

TITLE: Influence of the Structure Upon Several Properties of Mixtures and Vulcanizates of Filled Elastomers. II. Influence of the Degree of Linkage of Carbon Black Particles

PERIODICAL: Plaste und Kautschuk, 1960, Vol. 7, No. 10, pp. 504-508

TEXT: The present paper is a translation from the Czech by J. Techel (Radebeul). The relationship between the degree of linkage of the carbon black particles and the plasticity and processing of the unvulcanized carbon black mixtures on extruders, the module, and the hardness of the vulcanizates was investigated. A titration method was employed to determine the degree of linkage. Small samples of carbon black along with linseed oil were titrated with another oil, or, e.g., with dibutylphthalate. The value of oil absorption indicated by OA is defined by the amount of oil in cm^3 consumed up to a certain end point in the titration of 100 g of carbon black. The OA value is very complex and comprises first of all the influence of the specific surface of carbon

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84208

Influence of the Structure Upon Several Properties of Mixtures and Vulcanizates of Filled Elastomers. II. Influence of the Degree of Linkage of Carbon Black Particles

G/004/60/007/010/005/007
B015/B064

black, the influence of the degree of linkage and compression, as well as the condition of the surface complexes of carbon black. Six different kinds of carbon black were investigated in the present case. Table 1 gives mean values of the results obtained as well as the types of carbon black. The relations of some physical quantities of mixtures and vulcanizates to the OA values were investigated on five different types of elastomers - natural rubber, Buna S-3, Hycar 1042, butyl rubber, and Svitpren K. The diagrams (Figs. 5-8) show that the percentual compression in extrusion, the module at 300% elasticity, the plasticity according to Mooney, and the Shore hardness are in a sufficiently close relation with the OA values. The character of these relations is analogous for the different types of elastomers and vulcanization systems. On the basis of the results obtained the author assumes that these properties of carbon black mixtures and vulcanizates are influenced both by the particle size and their degree of linkage, i.e., approximately to the same extent as oil absorption is influenced in a complex manner. Thus, the determination of oil absorption is also suited to characterize carbon black for industrial laboratories.

Card 2/3

JANACEK, J.

Reaction of polymers in solid phase. Part 5: Deformability of vulcanizates filled with inorganic filling substances. Coll Cz Chem 26 no.12:2974-2980 D '61.

1. Institut fur makromolekulare Chemie, Tschecoslowakische Akademie der Wissenschaften, Prag.

JANACEK, J.

Reaction of polymers in solid phase. Part 6: Effect of deformations on the decreased tire fabric thickness caused by swelling. Coll Cz Chem 26 no.12:2981-2991 D '61.

1. Institut fur makromolekulare Chemie, Tschechoslowakische Akademie der Wissenschaften, Prag.

MEISSNER, B.; JANACEK, J.

The ineraction of parameters of some rubber-solvent systems. Coll Cz Chem 26 no.12:3101-3108 D '61.

1. Institute of Chemical Technology, Prague, and Institute of Macromolecular Chemistry, Czechoslovak Academy of Science, Prague,

S/081/62/000/023/114/120
B117/B186

TEXT: I. Vulcanization of natural (NR) and butadiene styrene rubber (BSR) was studied in the presence of various vulcanizing systems and 31 carbon black types with different specific surfaces, chemical activities, and structures. Carbon black was introduced in mixtures covering a wide range of volume concentrations (0.1 - 1 cm^3 carbon black per 1 cm^3 rubber). The amount of cross-links (CL) was determined according to the swelling of the samples in benzene. The dependence of CL on the general theoretical surface of the rubber-filler contact $K = P \cdot C \cdot \gamma$ was examined, where P is the specific surface, C the volume concentration, and γ the specific gravity of carbon black. When C of carbon black increases, CL increases linearly with K; for C = 0.25 and $P < 50\ m^2/g$, CL increases linearly with an increase in K; for carbon black with $P > 50\ m^2/g$, CL decreases with an increase in K. This is probably due to the fact that less disperse carbon black types have a more alkaline type surface than carbon black types with great P. The carbon black structure has no noticeable effect on CL. The relative carbon black activity, in relation to the formation of cross-links, is characterized by the quantity $\alpha = \nu_0 K/(\nu - \nu_0)$, where ν_0 and ν are the numbers of CL without and with a filler, respectively. α depends on the degree of

activity of the different types of carbon black is excluded, in the case M_{100} E and T depend linearly on PC^2, and in the case M_{300} on $PC^{1.5}$. This dependence, however, holds for carbon black types of equal structure and small specific surfaces; hence agglomeration of their particles is excluded. IV. The effect of 31 carbon black types with different P and structures (ST), as determined by absorption of oil, on the properties of vulcanizates of NR and BSR was investigated. The structure and the agglomerating capacity of carbon black affect the behavior of vulcanizates during deformation. An enlargement of structure retards the relaxation processes. The agglomerating capacity of carbon blacks increases proportionally with their P. The change of modulus depending on CL is less distinct in carbon black types with high-degree ST than in types with low-degree ST. The effect of ST and of agglomeration of carbon black on the properties of vulcanizates was thoroughly studied in its dependence on concentration, P of the carbon black, size of deformation, and character of the polymer system. V. The effect of inorganic fillers (SiO_2, $CaCO_3$, ZnO, kaolin, and Kaleil) on the properties of vulcanizates was studied on NR mixtures in the presence of various vulcanizing systems. The principal difference between carbon black and inorganic

SMRHOVA, Anna, inz.; JANACEK, Jiri

Determination of the aluminum nitride in steel. Hut listy 16 no.6:430-435 Je '61.

1. Vyzkumny ustav, Vitkovicke zelezarny Klementa Gottwalda, Ostrava.

JANACEK, Josef; FRANTA, Ivan, prof., inz., dr.

Relation between the physical and chemical constant properties of carbon blacks and the physical value of butadiene-styrene compounds and vulcanizates. Sbor chem tech no.3, part 1:271-327 '59.

1. Katedra technologie plastickych hmot, Vysoka skola chemicko-technologicka, Praha.

Degree of cohesion ... S/081/62/000/004/084/087
B101/B110

sorption of oil and I are approximately equivalent. The degree of cohesion of carbon black particles considerably affects the plasticity and the extrusion properties of nonvulcanized carbon black mixtures and the strength and the moduli of the vulcanizates. The characteristic value of oil absorption correlates well with these parameters, irrespective of the type of elastomer and vulcanization system. [Abstracter's note: Complete translation.]

Card 2/2

25463

15.9300

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E112/E453

AUTHORS: Janáček, Josef; Meissner, Bohumil, Rosík, Ladislav

TITLE: The effect of molecular weight on properties of unfilled butadiene-styrene rubber (Type SKS-30A)

PERIODICAL: Chemický průmysl, 1961, No.5, pp.274-277

TEXT: This paper is concerned with the Flory equation relating equilibrium volume swelling to the degree of cross-linking:

$$\nu = \frac{-1}{V_s} \frac{\ln(1 - v_r) + v_r + \varkappa v_r^2}{v_r^{1/3} - v_r/2}$$

where V_s = molar volume of solvent, v_r = equilibrium volume of rubber in swollen sample; $\varkappa$ = parameter of polymer-solvent interaction. The constant $\varkappa$ depends on the cohesive energy densities of the polymer and a necessary preliminary to obtaining reliable values of ν from swelling measurements by the Flory treatment has been the determination of the degree of cross-linking of the network. The principal aim of the present paper has been to determine how the mechanical properties of the vulcanizate are affected by the molecular weight of the original

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25463

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E112/E453

The effect of molecular weight ...

cross-linking of the network increases. The slope of the graphs for modulus and degree of cross linking increase are in good agreement with the kinetic theory of elasticity. The unfractioned rubber SKS-30A showed a poor degree of cross-linking, poor strength and low modulus, corresponding to the fraction of approximately molecular weight of 50000. The degree of cross-linking, modulus and strength of rubber SKS-30A can be improved if the low molecular fractions are removed by means of solvent extraction. There are 5 figures, 6 tables and 17 references: 8 Soviet-bloc and 9 non-Soviet-bloc. The four most recent references to English language publications read as follows: Gumbrell S.M., Mullins L., Rivlin R.S.: Trans. Faraday Soc. 49, 1496 (1953); Flory P.J.: Principles of Polymer Chemistry, Cornell 1953, Mullins L.: J.Pol.Sci. 19, 225 (1956); Bristow G.M., Watson W.F.: Trans.Faraday Soc.54. 1731 (1958).

ASSOCIATIONS: Ústav makromolekulární chemie ČSAV, Praha (Institute of Macromolecular Chemistry. ČSAV, Prague)
Janacek Josef; Katedra technologie plastických hmot, Vysoká škola chemickotechnologická, Praha (Department of Plastics Technology, School for

Card 3/4

Card 4/4

JANACEK, J.

Reaction of polymers in solid phase. Part 1: Effect of the filling material on the grade of network formation of rubber. Coll Cz Chem 26 no.10:2484-2495 O '61.

1. Institut fur makromolekulare Chemie, Tschechoslowakische Akademie der Wissenschaften, Prag.

JANACEK, J

SURNAME, Given Names

Country: Czechoslovakia

Academic Degrees: [not given]

Affiliation: Institute of Macromolecular Chemistry, Czechoslovak Academy of Sciences (Institut fuer makromolekulare Chemie, Tschechoslowakische Akademie der Wissenschaften), Prague

Source: Prague, Collection of Czechoslovak Chemical Communications, Vol 26, No 10, October 1961, pp [illegible]

Data: "Reactions of Polymers in the Solid Phase. I. The Influence of the Filler on the Degree of Cross-Linking of Rubber."

Also: Vol 26, No 11, November 1961, pp 2817-27, 2683-2694, 2695-2704

"II. The Effect of the Density of Cross-Linking on the Behavior of the Deformation Mechanism of Filled Vulcanisate."
"III. The Complex Influence of a Specific Surface and the Filler Concentration on the Deformation Behavior of Vulcanisates."
"IV. The Influence of the Agglomeration and Cross-Linking of Carbon Black Particles on the Deformation Behavior of Rubber Vulcanisate."

equation makes it possible to calculate the swelling limit of vulcanized rubber in any solvent if V_r and the constants are known for one solvent. For the system natural rubber-n-heptane, the interaction parameter is $\chi(V_r) = 0.46 + 0.13V_r$, but the dependence of the space lattice density on V_r is in good agreement with experimental data, and when its value is constant $\chi = 0.495$. The system Buna S-3 - n-heptane is a special case: here the dependence of $\chi(V_r)$ on V_r is not linear and the values of χ for the system differ sharply from the data given in the scientific literature. Thus n-heptane cannot be recommended for determining the density of the space lattice of vulcanized Buna S-3. The values of χ for the system: natural rubber-solvent and the recommended ranges of V_r are: benzene 0.435, 0.09 - 0.22; toluene 0.39, 0.09 - 0.22; xylene 0.36, 0.09 - 0.22; n-heptane 0.495, 0.15 - 0.32. For the system Buna S-3 - solvent, the corresponding values are: benzene 0.40, 0.05 - 0.23; toluene 0.365, 0.05 - 0.23; xylene 0.34, 0.05 - 0.23. The data obtained are in agreement with those given in the scientific literature. [Abstracter's note: Complete translation.]

[illegible], Given Names

Country: Czechoslovakia

Academic Degrees: Dr, Laureate of the State Prize

Affiliation: /not given/

Source: Bratislava, Pasa Veda, Vol VIII, No 9, 1961, pp 558-559.

Data: "Mineral Raw Materials in Eastern Slovakia."

GPO 981643

JAKUBA, A.; DOMZAL, V.

Synthesis of a finite RC four-terminal network with a prescribed transient voltage response. In English. p. 479. (ACTA TECHNICA, Vol. 1, No. 6, 1956, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000619420014-4"

DOLEZAL, J.; JANACEK, K.

Use of oscillographic polarography in quantitiative analysis. XI. Detection and determination of arsenic, antimony, and tin in mixtures. Coll Cz chem 25 no.3:885-889 Mr '60. (EEAI 9:12)

1. Institut fur analytische Chemie, Karlsuniversitat, Prag.
(Oscillograph)
(Polarograph and polarography)
(Arsenic)
(Antimony)
(Tin)

KLEINZELLER, A.; JANACEK, K.

The binding of mercury (^{203}hg) by animal tissues in vitro. Physiol. Bohemoslov. 11 no.4:285-293 '62.

1. Laboratory for Cellular Metabolism, Microbiological Institute, Czechoslovak Academy of Sciences, Prague.
(MERCURY) (KIDNEY) (CEREBRAL CORTEX) (LIVER)
(MUSCLES) (SKIN)

JANACEK, K.

A transient electrophysiological phenomenon in frog skin.
Physiol. Bohemoslov. 12 no.4:349-357 '63.

1. Laboratory for Cell Metabolism, Institute of Microbiology, Czechoslovak Academy of Sciences, Prague.
(SKIN) (ELECTROPHYSIOLOGY) (SODIUM)
(POTASSIUM) (STROPHANTHIN) (PERMEABILITY)

L 14467-66

ACC NR: AP6006024 SOURCE CODE: CZ/0053/65/014/004/0283/0283

AUTHOR: Natocin, J. V.; Rybova, R.; Janacek, K.

ORG: Laboratory of Cell Metabolism, Institute of Microbiology CSAV, Prague (Laborator bunecneho metabolismu, Mikrobiologicky ustav CSAV)

16 B

TITLE: Cell swelling and transepithelial osmosis [This paper was presented during Biophysical Days, Brno, 12 Jun 64.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 283

TOPIC TAGS: hormone, experiment animal, animal physiology, cell physiology, endocrinology, cytology

ABSTRACT: Study to ascertain mode of action of the antidiuretic hormone in increasing water permeability and through cells of interstitial spaces in the bladder of Rana temporaria in vitro. Lack of osmotic gradient did not prevent the antidiuretic hormone from increasing the tissue water from 3.27± 0.08 per Kg of dry tissue to 3.64 ± .01, with a statistically high significance. Role of potassium ions was found essential. [JPRS]

SUB CODE: 06 / SUBM DATE: none

Card 1/1 HW

JANACEK, Milos

Certain data on the development of the hip joint in man. Acta chir. orthop. traum. cech. 26 no.5-6:363-366 Nov 59.

1. Ortopedicka klinika university v Brne, prednosta prof. dr. lek. ved. B. Frejka.
(HIP, physiol.)

JANACEK, Valter, ing.

The Italian plan for saving the temples in Abou-Simbel. Gradevinar 14 no.5:158-161 My '62.

1. Clan Redakcionog odbora, "Gradevinar".

JANACEK, Valter, inz.

Construction of the Split Hydroelectric-Power Plant.
Gradevinar 14 no.7:217-224 Jl'63.

1. Clan Redakcionog odbora, "Gradevinar".

JANAČIK, Pavel; SROL, Stanislav

Report on the speleological investigation of ravines and caverns in the western part of Chocske pohorie. Geogr cas SAV 17 no.1:83-85 '65.

JANACKOVA, Alena; PEC, Karel

The periodical "Space Science Reviews". Pokroky mat fyz astr 8 no.6:355 '63.

JANACKOVA, Eva

Regional perfusion with chemotherapeutic agents in malignant tumors. Cas. lek. cesk. 101 no.28:145-155 13 Jl '62.

1. Chirurgicka klinika lekarske fakulty Palackeho university v Olomouci, prednosta prof. dr. V. Rapant, DrSc.
(ANTINEOPLASTIC AGENTS therapy)

JENICEK,M. Technicka spoluprace: JANACKOVA, H.; MOOTZOVA,J.

The trial to follow the changes of eosinophil count as an indicator of skill. Cesk. hyg. 9 no.4:193-201 My'64.

1. Katedra hygieny deti a dorostu lekarske fakulty hygienicke KU [Karlovy university], Praha.

[illegible], I.

New sources of human nutrition.

P. 114 (Ministry of Health, Research Institute for Organization of Health Service) Vol. 12, No. 7/8, July/Aug. 1957.

SO: Monthly Index of East European Accessions (L. C.) Vol. 6, No. 11 November 1957.

JANACKOVIC, Bojana; IVANIC, Rada

The quality of Secale cornutum cultivated in Yugoslavia. Arh. farm., Beogr. 4 no.4:108-114 Aug 54.

1. Iz instituta za ispitivanje lekovitog bilja NRS - Beograd.
(ERGOT ALKALOIDS
cultivation in Yugosl., quality)

[illegible]

[illegible] and M. MIHAILOV [illegible] Medicinal Plant Research (Institute for Medicinal Plants, Sofia) [illegible] Pharmacy Institute, National [illegible] Sofia, [illegible].

"Distribution and Quality of Atropa belladonna L. [illegible]"

Sofia, [illegible] Farmatsiia, Vol 12, No [illegible], 1963; [illegible] 317-325.

Abstract [Author's summary, modified]: analyses of 30 specimens of Atropa belladonna collected in 1958-1962 in Bulgaria are reviewed. Wild areas around the [illegible] of Ilinci, Sofia, and Pirin mines [illegible] minimal. The wildlike occurs [illegible] in [illegible] by unknown [illegible] villagers. Alkaloid content is highest in roots (1.9%) and unripe berries, lowest in ripe berries (0.1%). Quality satisfies all pharmacopeial requirements. Wild strips have adequate alkaloid content (0.3%) to make harvest [illegible] economical than cultivated ones. [illegible] 4 Yugoslav, British, Swiss, Russian, [illegible] pharmacopeial references.

1/1

[illegible] quality of the wild [illegible] in [illegible] in West Germany. Permanent [illegible] applicant [illegible]

1. Research Institute for Medicinal Plants of Sofia, Bulgaria.

JANAK, F.

SCIENCE

Periodicals: BULLETEN ASTRONOMICHESKIKH INSTITUTOV CHEKHOSLOVAKII.
BULLETIN OF THE ASTRONOMICAL INSTITUTES OF CZECHOSLOVAKIA.
Vol. 10, no. 2, Mar. 1959.

JANAK, F. Zero-point correction of the period-luminosity curve from the proper motions of the Cepheids. English (written in) p. 72.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 5,
May 1959, Unclass.

JANAK, Frantisek, promovany fyzik

Sun compass, a help in taking oriented samples of highly magnetic rocks. Geol pruzkum 5 no.8:248-249 Ag '63.

1. Ustav uzite geofyziky, Brno.

the magnetic anisotropy of the rocks studied and its influence on the direction of the remanent magnetic polarization. The present article gives a physical conception of the values measured for the magnetic susceptibility, derives the fundamental formulas for determining the anisotropy and evaluates their accuracy. V. Jelinek collaborated in elaborating Section II of the paper. Orig. art. has: 2 figures, 26 formulas and 1 table. [Orig. art. in Eng.] [JPRS: 32,859]

SUB CODE: 08, 20 / SUBM DATE: 20May64 / ORIG REF: 001 / SOV REF: 002
OTH REF: 010

Card 1/1

JANAK, J.

"Role of ion balance during the formation and metamorphosis of natural waters in sedimentation areas."

GEOLOGICKE PRACE; ZPRAVY, (Slovenska akademia vied, Geologicky ustav Dionyza Stura) Bratislave, Czechoslovakia, No. 15, 1959.

Monthly List of East European Accessions (EEAI), LC., Vol. 8, No. 8, August 1959

3491. Chromatographic semi-microanalysis of gases. I. Theoretical and practical basis of analysis. J. Janák (*Chem. Listy*, 1952, 47 [6], 817–827). The method enables the rapid (5 to 10 min.) and quant. determination of individual components of a gas mixture (1 to 30-ml samples) by measurement of their volumes eluted in certain sequence from activated charcoal or silica gel by CO_2 as eluting gas. A discussion of theory is followed by a detailed description of the apparatus, which consists in a horizontal adsorption column, a micro-burette for measuring the vol. of the sample, a nitrometer filled with conc. KOH, and devices for measuring and regulating the flow of the purified and dried eluting gas. The influence of the rate of flow of the eluting gas, of the size and shape of the adsorption column, of the vol. of sample, of temp., and of the grain size of the adsorbent is discussed. The method is limited to non-acidic gases, to gases insol. in, or not reacting with, conc. KOH, and to gases chemically unaffected by the catalytic action of the adsorbent.

G. Glasner

several hundreds of [illegible] of the cosmic radiation
in H_2 is present [illegible]

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1/2

Chemical Abst.
Vol. 48
Apr. 10, 1954
Analytical Chemistry

Chromatographic semimicroanalysis of gases. IV. Analysis of gaseous paraffins. Jaroslav Janák (Ústav pro naftový výzkum, Brno, Czech.) (1950); cf. C.A. 48, 3197c.—Silica gel was found a suitable adsorbent for the chromatographic analysis of gaseous paraffin mixts. It is unsuitable for the sepn. of permanent gases (H, N, O, CH_4) which can be detd. on activated C. R_f values for the gases on silica gel at 20° (with CO_2 as eluent) are listed: H 0.771, O 0.509, N 0.509, CH_4 0.351, C_2H_6 0.099, C_3H_8 0.0207, iso-C_4H_{10} 0.0070, n-C_4H_{10} 0.0061, C_5H_{12} (com.) 0.0023, iso-C_5H_{12} on activated C at 83° 0.0121. A universal app. for the analysis of gas mixts. is described having a silica gel column for the analysis of the unknown mixt. and of paraffins, and a C column for detg. the permanent gases. V. Analysis of unsaturated C_2 and C_3 hydrocarbons. Jaroslav Janák and Miroslav Rusek. *Ibid.* 1190-4.—Chromatographic analysis was extended to mixts. of unsatd. hydrocarbons. R_f values were measured on activated C at 20°: C_2H_4 0.0118, C_2H_2 0.0160; at 80°: C_2H_4 0.0060, C_2H_2 0.0025, CH_2:CHMe, 0.0135, CH:CMe 0.0190; on silica gel: at 20°: C_2H_4 0.0448, C_2H_2 0.0161, CH_2:CHMe 0.0056; at 80°: C_2H_4 0.428, C_2H_2 0.351, C_2H_2 0.2045, C_3H_6 0.227, CH_2:CHMe 0.123, CH:CMe 0.110, iso-C_4H_{10} 0.0075, n-C_4H_{10} 0.0941. The order of elution on C [C_2H_2, C_2H_4, C_3H_6] is reversed on silica gel. C_2H_2 and C_3H_6 having the same R_f on SiO_2 can be sepd. on C. The mixt. of CH_2:CHMe and n-C_4H_{10} cannot be successfully sepd. on either of the adsorbents. Heat applied by means of an adjustable furnace is used for increasing the desorption rate when advantageous. VI. Analysis of rare gases. Jaroslav Janák. *Ibid.* 1348-53.—The detn. of He, Ne, A, Kr, and Xe is possible by the chromatographic analysis on activated C. R_f at 20° are as follows: He 0.013, Ne 0.041, A 0.3028, Kr 0.103, Xe 0.0172. H having the same R_f as He and Ne, and O and N having the same value as A, must be removed chemically before the analysis. VII. Analysis of dissolved gases. Jaroslav Janák and Iva Pitrová (Ústav pro naftový výzkum, Brno, Czech.). *Ibid.* 1476-80.—Dissolved gases are expelled from the solvent (water, oil) by passing a stream of CO_2 through a measured vol. of the liquid at an appropriate temp. The stream of gases is led into an azotometer where CO_2 is absorbed in KOH soln., and total vol. of gases measured. From

JANAK, J.

Prospecting for crude oil deposits and natural gas and the correlation of horizons based on the chemical composition of gases dissolved in water. p. 225. NAFTA, Krakow. Vol. 10, no. 10, Oct. 1954.

SOURCE: East European Acession (EEAL) Library of Congress Vol. 5, no. 8, August 1956.

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APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000619420014-4"

112. Chromatographic semimicro-analysis of gases. VIII. Separation and analysis of some halogenated hydrocarbons. J. Janák and M. Kopecký (*Chem. Listy*, 1951, 48 [2], 297–311).—The chromatographic separation and analyses of mixtures of halogenated hydrocarbons is described. The following R_F values were obtained on silica gel with the passage of the eluting gas (CO_2) at the rate of 0·7 ml per sec.: CH_2Cl_2 0·0039; CH_2Br_2 0·0030; $CH_2{:}CHCl$ 0·0024; $CF_2{:}CFCl$ 0·0099 at 20° C; CH_3Cl 0·169; CH_3Br 0·120; C_2H_5Cl 0·104; $CF_2{:}CFCl$ 0·214 at 85° C; and $CH_2{:}CHCl$ 0·110 at 65° to 70° C. In view of the considerable influence of temp. on the adsorption characteristics of this group of gases, better separation is achieved at 20° than at 85° C. Analytical applications of the method are limited owing to partial hydrolysis of the halides during their contact with the KOH in the azotometer, resulting in a decrease of the measured vol. The reactivity increases in the order $CF_2{:}CFCl < CH_2{:}CHCl < CH_3Cl < C_2H_5Cl$. The determination of CH_3Br is impossible. L. Glasser

PhOH and [illegible] HCl, concg., and distg. H_2O and excess PhOH off under reduced pressure, crystd. from anhyd. AcOH, m. 216-17°. *2,6-Bis(3,5-hydroxymethyl-4-hydroxybenzyl)-p-cresol* (II) was obtained by dissolving 1 g. I in 5.7 g. 20% NaOH and treating it at room temp. with 2.5 g. 36.5% H_2CO. After 5-7 days the mixt. was neutralized with HCl to pH 7-7.5, then acidified with AcOH to pH 6-6.5. An oily product crystallized after a few days to give crystals from alc., $C_{23}H_{28}O_7$, m. 145°. *2,2'-Dihydroxy-5-methyldiphenylmethane* (III) was obtained by dissolving 4 g. *o*-hydroxybenzyl alc. in 36 g. melted *p*-cresol and 2 ml. concd. HCl, boiling distg. excess *p*-cresol off with steam, and emulsifying remainder with H_2O. After a few days III crystallized from alc. and m. 99-101°, sol. in C_6H_6. *2,4'-Dihydroxy-5-methyldiphenylmethane* (IV) was obtained by condensing *p*-hydroxybenzyl alc. with *p*-cresol. Crystn. begins from emulsion to give crystals from C_6H_6, m. 138-40°. *2,6-Bis[5-(4-hydroxybenzyl)-3-hydroxybenzyl]-p-cresol* (V), obtained by dissolving 6 g. 4,4'-dihydroxydiphenylmethane in 50 ml. concd. AcOH. At 40°, 3 g. 2,6-dimethylol-*p*-cresol was added with stirring, heated, and treated with 2 ml. concd. HCl, then brought to boiling, and poured into 1 l. H_2O. The white ppt. is washed and dissolved in hot xylene. V is a white noncryst. substance, $C_{28}H_{32}O_4$, softening above 110°. *2,4,6-Tris(3-methyl-6-hydroxybenzyl)phenol* (VI) was obtained by dissolving 2 g. Na 2,4,6-trimethylolphenate in 50 g. melted *p*-cresol. The mass is heated, then 10 ml. concd. HCl slowly added, heating continued (water bath) for 15-20 min., the pptd. NaCl filtered, and excess *p*-cresol distd. off with steam. $C_{29}H_{30}O_4$ crystals from C_6H_6, m. 182.5-4°. *3,3',5,5'-Tetrakis(2-hydroxy-3-methylbenzyl)-4,4'-dihydroxydiphenylmethane* (VII) was obtained by dissolving 2.3 g. 3,3',5,5'-tetramethylol-4,4'-dihydroxydiphenylmethane in 20 g. melted *p*-cresol, adding at 35° 1 ml. concd. HCl (temp. rises to 60°), distg. excess *p*-cresol off with steam and crystg. a few times from xylene in gellike form, then from toluene and benzene, m. 201-2°, sol. in Et_2O, MeOH, EtOH, and acetone.

L. M. Barakan...

CZECH

394. Chromatographic microanalysis of gases. IX. Determination of nitrous oxide. J. Janák and M. Kocík (*Chem. Listy*, 1954, 48, 392-394).—The chromatographic technique of gas analysis is suitable for the rapid estimation of N_2O in admixture with hydrogen, nitrogen, methane and ethane, in commercial N_2O and in natural gas. The R_F values of N_2O, measured in the usual way in an adsorption column 220 mm long and 4·1 mm in diameter with the eluting gas (CO_2) passing at the rate of 0·7 ml per sec., were as follows: on activated carbon, 0·0204 at 20° C. and 0·234 at 80° C.; and on silica gel, 0·0628 at 20° C. and 0·267 at 80° C. Owing to the slight solubility of N_2O in conc. KOH, the nitrometer should be filled with a KOH soln. that has been exposed to an atmosphere containing N_2O.

G. Glasser

Method suitable for analysis of gases containing N_2O in presence of other gases.

JANAK, JAROSLAV

Czechoslovakia/Analytical Chemistry - General Questions, G-1

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61801

Author: Janak, Jaroslav; Tesarik, Karel

Institution: None

Title: Chromatographic Semimicroanalysis of Gases. X. Determination of Small Smounts and Traces of Helium, Neon and Hydrogen in Gases

Original Periodical: Chromatograficka semimikroanalysa plynu. X. Stanoveni malych az stopovych mnozstvi helia s neonem a vodiku v plynech, Chem. lysty, 1954, 48, No 7, 1051-1057; Czech; Sb. chekhosl. khim. rabot, 1955, 20, No 2, 348-355; German; Russian resumé

Abstract: The method of determining small amounts of He + Ne and H_2 in gases is based on concentration of He, Ne and H_2 by adsorption and condensation of components of the gas on activated charcoal (grains 1.00-1.75 mm) at low temperatures (from -78° to -185°) with subsequent chromatographic analysis of the concentrate He, Ne and H_2; He + Ne are determined chromatographically after combustion of H_2

Card 1/2

Czechoslovakia/Analytical Chemistry - General Questions, G-1

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61801

Abstract: over CuO. It was found that with a considerable content of He in the gas it is necessary to take a small sample of the gas and conduct concentration in the region of simple adsorption; with a small content of He it is necessary to use a large volume of gas and conduct concentration in the region of maximum condensation. The method is utilized for determination of He and Ne in air and natural gases and H_2 (at concentrations of 0.1-0.001% by volume) in electrolytic oxygen, technical N_2 and Ar. Communication IX, see Referat Zhur - Khimiya, 1956, 58459.

Card 2/2

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CZECH

The theory of continued ion and concentration [illegible] in subsurface waters in sedimentation basins [illegible] Jaroh. *Práce Výzk. Ústav. Vysoké Tatry*, Prague, [illegible] 1958, [illegible]—A geochem. study of deep subsurface waters in the Czechoslovakian part of the great Alps sedimentation basin was made [illegible]. A theory was developed, interpreting the origin and occurrence of various sorts of subterranean waters. It was postulated that a great [illegible] exchange exists among various underground regions and surface waters influencing the chem. compn. of these waters. A gradient expresses numerically the difference in chem. compn. was formed as K_1° [illegible] and the value for [illegible] differential is [illegible] where [illegible] is the depth in [illegible] and K is the function. It was assumed that the salt concn. is directly proportional to the depth from which the water circulated. The surface water contn. corresponds to [illegible], while underground water [illegible] is higher, [illegible] effect on pond [illegible] rich in [illegible] mineral content and chem. compn. [illegible] the area, [illegible] the chem. compn. [illegible] petroleum [illegible] and [illegible] and [illegible] water origin. [illegible] nature, [illegible] and chem. [illegible]

Jos. Gregor

CZECH

/11181* Chromatographic Semi-Microanalysis of Gases. Khromatograficheskii polumikroanaliz gazov. VIII. Analysis of Dissolved Gases. Analiz rastvorennykh gazov. IX. The Determination of Nitrous Oxide. Die Bestimmung von Stickoxydul. X. Determination of Small Quantities of Helium, Together With Neon, and of Hydrogen in Gases. Die Bestimmung kleiner Mengen bis Spuren von Helium mit Neon und von Wasserstoff in Gasen. (Russian and German.) J. Janák, I. Pláralová, M. Ryšek, and M. Tesařík. Collection of Czechoslovak Chemical Communications, v. 20, no. 2, Apr. 1955, p. 336-355.

Includes diagrams, tables, graphs. 41 ref.

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000619420014-4"

Use of zeolites in gas chromatography. Preliminary communication. J. Janák. *Collection Czechoslov. Chem. Communs.* 20, 1241-3(1955)(in German).—See *C.A.* 50, 104b. F. J. C.

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000619420014-4"

CZECH

Chromatographic semimicroanalysis of gases. XI. "Direct determination of individual olefins in gases." Jaroslav Janák and Miroslav Hanák (Ústav pro zaměstnanost v Brně, Czech.). *Chem. Listy* 49, 101-9(1955); cf. C.A. 48, 13536*d*.—A method for det'g. traces of olefins in mixed gases is based on absorption and concn. of olefins in 0.05*M* $Hg(ClO_4)_2$ in 3*M* $HClO_4$ in a special circulation app. C_2H_4 (I), CH_2:CHMe (II), and butylenes (III) were det'd. down to the content 10^{-4} vol. %. With olefin concn. above 0.04%, the det'n. in 10-200-ml. sample is possible with an accuracy within 10^{-2} vol. %. Chromatographic spectra (*R*$_f$ this.) of olefins on silicagel B are given: at 20°: I 0.018, II 0.0050; at 60°: I 0.108, II 0.009, III 0.053; at 80°: I 0.351, II 0.174, III 0.138. M. Hudlický

TANAKA, T.

Hydrogeologic and geochemical studies of the occurrence of hydrogen sulfide-containing mineral waters at Bad Smrdáky, Slovakia. Josef Jandík and Jaroslav Janák (Inst. Naftaerforsch., Brno, Czech.). *Geol. Práce* (Bratislava) 5, 62–107(1956)(German summary).—Chem. analysis of the waters show them to be mainly Na bicarbonate waters contg. free H_2S and methane. They are believed to be related to waters of the oil-field type. — Michael Fleischer

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APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000619420014-4"